

positioning an electrode in contact with, or in close proximity to, an outer surface of an annulus of a disc within the patient's spine, wherein the annulus has an opening therein; and

applying a high frequency voltage to the electrode, the voltage being sufficient to at least partially close the opening in the annulus.

35. The method of claim 32 further comprising: prior to the positioning step, percutaneously introducing the electrode to the patient's spine.

38. The method of claim 32 further comprising: positioning a return electrode on the outer surface of the patient's body, and conducting electric current from the electrode, through the patient's body, to the return electrode.

39. The method of claim 32 wherein the step of positioning the electrode comprises positioning a single, active electrode in at least close proximity to the outer surface of the annulus.

40. The method of claim 32 wherein the step of positioning the electrode comprises positioning a plurality of electrically isolated electrode terminals in at least close proximity to the outer surface of the annulus.

41. The method of claim 32 wherein the opening is on an inner surface of the annulus, and wherein the positioning step comprises positioning the electrode on the outer surface of the annulus adjacent to the opening.

42. The method of claim 32 wherein the opening is on the outer surface of the annulus, and wherein the positioning step comprises positioning the electrode adjacent to, or in contact with, the opening.

43. The method of claim 32 further comprising: prior to the positioning step, anteriorly introducing the electrode to the patient's spine.

44. The method of claim 32 wherein the electrode is disposed on an instrument shaft, and wherein the applying step comprises applying the high frequency voltage between the electrode and a return electrode, the return electrode disposed on the instrument shaft.

45. The method of claim 32 wherein the applying step comprises applying the high frequency voltage in the range of from about 45 volts rms to 60 volts rms to the electrode.

46. The method of claim 32 wherein the applying step is carried out at a voltage level and for a time period sufficient to heat at least a portion of the annulus to a temperature in the range of from about 55° C to 70° C.

47. A method for treating tissue within a patient's spine comprising:
positioning an electrode in close proximity to, or in contact with, an outer surface of an annulus of an intervertebral disc; and
heating a portion of the annulus to a temperature in the range of from about 55° C to 70° C.

Kindly add the following new claims:

--48. (New) The method of claim 47, further comprising:
while the electrode is positioned in at least close proximity to the outer surface of the annulus, applying a high frequency voltage between the electrode and a return electrode, wherein the applied voltage is effective in heating at least the outer surface of the annulus.

49. (New) The method of claim 48, wherein the outer surface of the annulus has an opening therein, and wherein the applied voltage effects closure of the opening.

50. (New) The method of claim 47, wherein the heating step effects contraction of the annulus.

51. (New) The method of claim 48, wherein the applied voltage is effective in heating at least the outer surface of the annulus to a temperature in the range of from about 60° C to 70° C.

52. (New) A method for treating an intervertebral disc of a patient, comprising:

a) advancing an active electrode through an annulus fibrosus of the disc to form an opening in the annulus fibrosus;

b) positioning the active electrode within a nucleus pulposus of the disc;

c) applying a high frequency voltage between the active electrode and a return electrode, wherein the voltage is sufficient to contract at least a portion of the nucleus pulposus; and

d) while continuing said step c), withdrawing the active electrode from the disc via the opening in the annulus fibrosus, wherein the voltage is sufficient to at least partially close the opening in the annulus fibrosus.

53. (New) The method of claim 52, further comprising sealing the opening in the annulus fibrosus as a result of the voltage applied during said step d).

54. (New) The method of claim 52, wherein the voltage is sufficient to effect contraction of collagen fibers in the nucleus pulposus or the annulus fibrosus.

55. (New) The method of claim 52, wherein the opening in the annulus fibrosus is partially closed via contraction of collagen fibers in the annulus fibrosus.

56. (New) The method of claim 52, wherein contraction of the nucleus pulposus is effected via contraction of collagen fibers in the nucleus pulposus.

57. (New) The method of claim 52, further comprising: delivering an electrically conductive fluid to the active electrode, wherein the electrically conductive fluid provides a current flow path between the active electrode and the return electrode.

58. (New) The method of claim 52, wherein during said step c) at least a portion of the nucleus pulposus is heated to a temperature in the range of from about 60° C to 70° C.

59. (New) The method of claim 52, wherein said step c) comprises applying the voltage in the range of from about 45 volts rms to 60 volts rms.--